



Marine Corps Base Hawaii

Hangar Bay Lighting Improvements

Bill Nutting

Energy Manager



Hangar Bay Lighting Improvements

- **Before:** Hangars 101 - 105 each had 72 - 1000 Watt Metal Halide light fixtures; many were overheating and exploding
- **After:** Each hangar has 122 - 400 Watt dual reflector “Stingray” MH light fixtures
- **Installed Daylighting and Timer Controls**
- **Results:**
 - 104 KW reduction in demand
 - 1,286,000 KWh/Year (50%) reduction in energy use
 - \$134,000 Annual cost savings
 - \$41,475 rebate from HECO
 - Simple Payback 4.5 years



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SuperVision Plus - MCBH - Kaneohe Bay

File View Actions Configure Tools Help

Lighting Circuit

MCBH - Kaneohe Bay
Lighting Controls HGR 101-105
Hangar 102
Roadside Lighting
Lighting Circuit

HANGAR-102 ROADSIDE Lighting

West Photocell is:	468.1
West-1 SetPoint is:	500.0
West-1 Hysterisis is:	300.0
West-1 Status is:	ON
West-2 SetPoint is:	800.0
West-2 Hysterisis is:	200.0
West-2 Status is:	ON
Center Photocell is:	1585.4
Center SetPoint is:	400.0
Center Hysterisis is:	200.0
Center Status is:	OFF
East Photocell is:	1009.2
East-1 SetPoint is:	500.0
East-1 Hysterisis is:	300.0
East-1 Status is:	OFF
East-2 SetPoint is:	800.0
East-2 Hysterisis is:	200.0
East-2 Status is:	OFF
Override Status is:	OFF
Override Time SetPoint(hrs:min)	2:00

[BaySide Lighting](#)

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HANGAR-102 ROADSIDE LIGHTING CONTROLS

Lighting Control Sequence of Operation

The Building Automation Control System (BACS) will enable the lights to operate based on a weekly schedule (adjustable). When the BACS has enabled the lights on, three

Operator: System Administrator



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➤ Recognition

- **Commander in Chief's Special Recognition for Installation Excellence – May 2003**

- **Award of Merit**

International Illumination Design Award for Energy and Environmental Design

- **Nominated for 2004 Federal Energy and Water Management Award**

- **Nominated for HECO 2004 Energy Efficiency Award**



Hangar Bay Lighting Improvements

➤ Participants

- Project Manager – Bill Nutting (MCBH)
- Design – Bill Nutting (MCBH) and Jim Thomas (Stingray Lighting)
- Vendor Reps – Tom Brennan (ECO-Lite) and Jim Thomas (Stingray Lighting)
- Contractor/Installer – MCBH Electricians